UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,860	01/15/2004	Jason D. Bivens	HES 2003-IP-011909U1	4618

29920 7590 11/29/2004

JOHN W. WUSTENBERG
P.O. BOX 1431
DUNCAN, OK 73536

EXAMINER	
LAU, TUNG S	

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/757,860	BIVENS ET AL.	
	Examiner	Art Unit	
	Tung S Lau	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *19-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-11 and 13-18* is/are rejected.

7)☒ Claim(s) *3 and 12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *See office action*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The IDS filed on 1-15-2004 has been accepted and signed by the examiner.

Election/Restrictions

Combination/subcombination

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-18, drawn to determining corrected weight of the fluid, classified in class 702, subclass 101.

   II. Claims 19-25, drawn to determining corrected weight of the fluid using vacuum source, classified in class 702, subclass 100.

The inventions are distinct, each from the other because of the following reasons:

Inventions of each of groups I-II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions can each be used for their respective uses has separate utility such as different way of detecting fluid. See MPEP § 806.05(d).

Invention I and II are related as combination (invention I) and subcombination (invention II). Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particular of the subcombinations as claimed for patentability, and (2) that the subcombination has utility by itself or in other

combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because Invention II, the combination as claimed does not required determining corrected weight of the fluid using vacuum source. The subcombination (invention II) has separate utility such as a determining corrected weight of the fluid using vacuum source.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with John W. Wustenberg on 11/18/04 a provisional election was made without traverse to prosecute the invention of group I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-11, 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Krueger (U.S. Patent 4,474,063).

Regarding claim 1:

Krueger discloses a method of determining a corrected weight of a batching tank, the batching tank adapted to receive one or more materials, each material having a density, the batching tank having a weight, a pressure, and a volume, wherein the batching tank initially comprises a fluid having a density, the method comprising: measuring one or more first weights of the batching tank, wherein the first weights are determined while the fluid is removed from the batching tank (Col. 1-2, Lines 55-36); measuring one or more first pressures in the batching tank, wherein each first pressure is determined substantially simultaneously with the determination of a first weight (Col. 1-2, Lines 55-36); measuring one or more second weights of the batching tank, wherein each second weight is measured while a material is transferred into the batching tank; measuring one or more second pressures in the batching tank (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57), wherein each second pressure is measured substantially simultaneously with the measurement of each second weight (Col. 1-2, Lines 55-36); and

determining a corrected weight of the batching tank based on one of the second weights, one of the second pressures, one or more first weights, one or more first pressures, the density of the material being transferred to the batching tank, and the density of the fluid (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57).

Regarding claim 10:

Krueger discloses a method of transferring material to a batching tank, the material having a density, the batching tank having a weight, a pressure, and a volume, the batching tank initially comprising a fluid having a density, the method comprising: removing fluid from the batching tank (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57); measuring one or more first weights of the batching tank (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57), wherein the first weights are determined while the fluid is removed from the batching tank; measuring one or more first pressures in the batching tank (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57), wherein each first pressure is measured substantially simultaneously with the measurement of the first weight; transferring a material to the batching tank (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57); measuring a second weight of the batching tank, wherein the second weight is measured while the material is being transferred into the batching tank; measuring a second pressure in the batching tank, wherein the second pressure is measured substantially simultaneously with the measurement of each second weight (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57); and determining a corrected weight of the batching tank based on the second weight, the second pressure, one or more first weights, one or more first

pressures, and one or more material properties (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57).

Regarding claims 2, 11, Krueger further discloses determining a volume occupied by the fluid (Col. 1-2, Lines 55-36); determining a volume occupied by the material (Col. 1-2, Lines 55-36); determining a fluid weight by multiplying the volume occupied by the fluid by the density of the fluid (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57); determining a material weight by multiplying the volume occupied by the material by the density of the material (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57); and determining the corrected weight by adding the material weight and the fluid weight (Col. 1-2, Lines 55-36, Col. 6, Lines 10-57); Regarding claims 4, 13, Krueger further discloses the tank filled with material (abstract); Regarding claims 5, 14, Krueger further discloses the material is flowing (Col. 1, Lines 10-52, fig. 1); Regarding claims 6, 15, Krueger further discloses material is halted from flowing into the batching tank when the corrected weight is near a target weight (fig. 1, unit 18, Col. 6, Lines 10-57); Regarding claims 7, 16, Krueger further discloses transferring current material (fig. 1, unit 18, Col. 6, Lines 10-57); Regarding claims 8, 17, Krueger further discloses correct weight of next material (fig. 1, unit 18, Col. 6, Lines 10-57); Regarding claims 9, 18, Krueger further discloses log in first weight and pressure (Col. 1-2, Lines 55-36).

Claim Objections

4. Claims 3 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach selecting a first weight, wherein the first weight was measured substantially simultaneously with the closest first pressure, and wherein the closest first pressure is nearest the second pressure; and calculating the density of the fluid by dividing the selected first weight by the volume of the batching tank.
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL

John Barlow
Supervisory Patent Examiner
Technology Center 2600